Public Forum

Understanding and Promoting the Reading Comprehension of Bilingual Students

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Abstract

Increased attention from the research community is necessary to better understand difficulties faced by many Latino students in English literacy acquisition (García, Pearson & Jiménez, 1994; Pallas, Natriello & McDill, 1989). Growing rates of Latino student enrollment coupled with declining levels of academic achievement demand a better integration of research and classroom practice (U. S. Census, 1990; Waggoner, 1991). This paper explores three key issues in the literacy acquisition of Latino students. They are: (a) common problems faced by second-language readers of English, (b) explicit strategies for transfer of first-language strengths to second-language literacy, and (c) the development of language-specific strategies. Recommendations for classroom practice that are grounded in the discussion of the three key issues are included in the final section.

Introduction

As a group, Latino students from Spanish-speaking backgrounds, have not received effective reading instruction in U.S. schools (Espinosa & Ochoa, 1986; Ortiz, 1986; Ramírez, 1992; Steinberg, Blinde, & Chan, 1984). This problem has grown in magnitude in spite of substantial progress made in the field of reading research during the 1980s (Barr, Kamil, Mosenthal, & Pearson, 1991; García, Pearson, & Jiménez, 1994; Pearson, Barr, Kamil, & Mosenthal, 1984). The lack of well-documented and field-tested instructional practices tailored to the special needs and abilities of Latino students may be due, at least in part, to the paucity of attention this population has received from researchers (Garcia, et al., 1994). Finding ways to meet the needs of Spanish/English bilingual readers requires taking a fresh look at existing practices, developing new information derived from research, and documenting more completely how this information can inform classroom practice.

Increasing rates of growth in Latino student enrollment have infused discussions of this topic with a sense of urgency. The U.S. Census Bureau (1990) claims that the number of Spanish speakers in the U.S. has increased by more than 30 percent over the last decade to 17.3 million. Many believe that the Census figures substantially underestimate the total (Waggoner, 1991). Current estimates project that by the year 2020 more than 86 million Americans will be of African, Asian, and Latino heritage (U.S. Census, 1990). Substantial further increases in the language minority student population are expected, perhaps by as much as one third by the year 2000 (de la Rosa & Maw, 1990). While only one in ten children in U.S. schools in 1982 was Latino, this ratio will be approximately one in four by the year 2020 (Pallas, Natriello, & McDill, 1989).

Espinosa and Ochoa (1986) document that minority children in general, and language-minority children in particular, experience academic stress as early as the third grade. This stress, they claim, continues throughout their schooling (i.e., 12th grade). The researchers reported a negative correlation for ethnic group with reading achievement for Native-American, African-American, and Hispanic students beginning as early as grade 3 and continuing through grade 12. While learning to read in a second language is never easy, the task is compounded for language minority students in the U. S. Acknowledgement that these students attend poorly funded and *de facto* segregated schools, are often taught by inexperienced teachers, and are surrounded by a difficult learning environment, must also be considered.

Efforts to enhance the academic achievement of Spanish/English bilingual students have to date most often been programmatic in nature. The majority of recommended programs fall somewhere on a continuum of greater to lesser use of Spanish or English. These programs include: sheltered English, transitional bilingual education, and dual or two-way immersion. The language spoken by the teacher seems to be the critical feature differentiating these programs (see Table 1). What is lacking is information on how instruction for language minority students, with the one exception of language use, should differ from and/or resemble that provided to children from mainstream backgrounds. *What is needed is information on how to adapt and mod W~ curricular content and teaching methods in such a way that opportunities for success are maximized for bilingual students*. Williams and Snipper (1990) argue convincingly that

literacy and language development are the keys to academic success for language minority students.

Table 1
Distinctive features of three programs designed to serve Latino students

	Structured English Immersion	**Transitional Bilingual Education**	**Two-way or Dual Immersion**
Students Served	Any student for whom English is a second language. Very few programs in existence.	Any student for whom English is a second language. Most commonly available bilingual program for Latino students.	Both students for whom English is a second language (minority students) and those whose native language is English (mainstream students). Few programs exist.
Role of Language	English only is used by teachers for teaching content. In some programs students may respond or initiated interaction in their native language, but this is not encouraged.	Emphasis is on using students' primary or native language as a means of teaching content. Actual ratio of primary language use to English varies from program to program. English as a second language is taught as a separate component.	Emphasis is on using both English and the non-English language for teaching content. This is usually accomplished by adopting an alternate-day language schedule, half-day language split, or alternate semester approach.
Special Instructional Techniques	Focus is on simplified English use so that students receive comprehensible input	No universally accepted body of practice. Varies by individual program from holistic instruction to more skills-based techniques.	Focus is on providing students with comprehensible input in their second language.

Table 1 (continued)
Distinctive features of three programs designed to serve Latino students

	Structured English Immersion	Transitional Bilingual Education	Two-way or Dual Immersion
Program Goals	To develop English language proficiency as quickly as possible while simultaneously teaching content area subjects so that students can be moved into general education classrooms.	To develop English language proficiency as quickly as possible. Students' primary language is viewed as a means to this end. Ultimate goal is to move students into general education classrooms.	To develop academic language proficiency in both English and the non-English language for both groups of students. Some programs continue through high school.

Three Key Issues

This paper explores three key issues and their relationship to Latino students whose primary language is Spanish. These issues were derived from research conducted by the author and a review of the literature on second-language reading. The issues are directly relevant to the development of instructional strategies for teaching reading to Latino students. The three key issues examined here are: (a) common problems faced by second-language readers of English, (b) explicit strategies for transfer of first-language reading ability to second-language reading, and (c) the development of language-specific reading strategies. Description and discussion of instructional practices that promote achievement in second language reading is provided at the end of the paper.

Problems in Second Language Reading

Two important problems facing Latino students with respect to English reading are: a limited English vocabulary and the extended period of time needed to learn a second language sufficiently to achieve academic success.

Unknown vocabulary. Students learning English as a second-language (ESL) encounter many problems due to the presence of unknown vocabulary items in the texts they are asked to read (Garcia, 1988; 1991; Jiménez, 1992). Although syntax and other facets of the English language are also a concern (McLaughlin,

1987), vocabulary is the single most frequently encountered obstacle by Spanish-English bilingual readers (García, 1991; Jiménez, 1992). For example, García examined the English test performance of Spanish-speaking Hispanic children and found that half incorrectly answered a test item because of an inability to comprehend two vocabulary items. The item was designed to test students' comprehension of a passage on Canada, and was as follows:

22. A serious handicap for growth in trade is
    a. a lack of streams
    b. few harbors
    c. icebound harbors
    d. overproduction

Many students missed the correct answer, "c' because they did not know the meaning of *icebound*, and because they had only partial knowledge of the word *handicap*. In retrospective interviews many students admitted not knowing the word icebound, and others thought of the word *handicap* as an adjective. García provides the following example of student thinking concerning this test item:

Interviewer: Why would that {icebound harbors} be a problem?

Evita: Porque los handicapped no pueden pasar por allá. (*Because the handicapped can't go through there*.)

Evita: ¿Cómo pasear un niño por allá? Tendrá que balancearse. (*How could a child walk through there? He would have to balance himself*)

The original test item, designed as a measure of student reading comprehension, also tapped knowledge of English vocabulary for many of these students. Those who write and use standardized tests of reading achievement need to be aware that language proficiency is frequently confounded with reading comprehension for students learning English.

Using think alouds to examine the strategic reading processes of Spanish/English bilingual students in grade 6 who were successful English readers, the author discovered that these readers focused much more of their attention on unknown vocabulary than did three successful monolingual English readers. The frequency with which the bilingual readers stated that unknown vocabulary interfered with their comprehension was approximately ten times as great as that of the monolingual student bilingual readers, three English texts with a total of 1,342 words were read by both bilingual and monolingual

students). A few examples of the bilingual readers' thinking follows:

Samuel: Yea like this {word} radiate, —you positively radiate said the distinguished visitor—, I really don't understand that.

Kathy: They were like using other words.. See like *wiped out*. That probably means like killing or something...

Investigator: Oh, ok, so that's not a word you would use normally?

Kathy: No

Samuel: Is that... I don't know this word, *brutality*?

Pamela: *Trotted*, ok, trotted means like, trotted, maybe trotted means like when you, like the rhinoceros I think it says, yea rhinoceros, they're big, right, they look like they have, suit of armor, so I guess they were like a big ship, like a building maybe.

In two classroom observational studies in which the author was involved (García, Stephens, Koenke, Pearson, Harris, & Jiménez, 1989; Gersten & Jiménez, 1994), vocabulary instruction tended to be incidental, unsystematic, and only peripherally related to the texts students were asked to read. In one fifth-grade classroom with large numbers of language minority students in southern California, new vocabulary words were briefly described and most often immediately dropped. Students did not have an opportunity to use the words themselves, they merely *heard the teacher use them*. Once, when reading a text on Greek mythology, the teacher asked, "What do we mean when the author talks about his descendants?", a student answered, "His family." Rather than clarifying which members of a family qualify as descendants, the teacher simply moved to his next point. The constrained nature of student interaction with the new vocabulary, and the limited amount of information provided, allowed few opportunities for student retention of this material.

In another classroom observational study conducted in the Midwest (Garcia et al., 1989), middle school students' vocabulary instruction consisted almost entirely of copying lists of new words from the blackboard, looking them up in a text book glossary, and occasionally writing a sentence with the target words. While some benefits may accrue from such activities, more appealing alternatives exist that seem practically and theoretically preferable (Durkin, 1989; Johnson & Pearson, 1984; Nagy, 1988).

Time needed to learn a second language. Many myths are associated with learning a second language. For example, research findings consistently report that academic mastery of a second language requires considerable time. Collier (1987) found that the amount of time needed to approach grade-level performance varied, depending on such factors as age on arrival in the U.S. and length of time in American schools. She studied advantaged children (students who tended to come from families with low income levels but whose parents were from middle-to upper-class backgrounds in their country of origin and who were upwardly mobile) from 75 different language backgrounds. Children 8-11 years of age on arrival attained grade-level scores the quickest, needing from 2 to 5 years of schooling. Children 5-7 years old did not attain grade level in all academic areas during the four years that Collier collected data. The 5-7 year old children were particularly weak in reading, as were children aged 5 upon arrival. The 12-15 year olds were projected to require from 6 to 8 years to attain grade level performance.

Early reports from Canada's celebrated immersion programs claimed that although the middle-class Anglophone children learning French could read in that language at high levels (as measured by standardized tests of reading), they nevertheless were not as proficient as comparably-aged native French-speaking children (Lambert & Tucker, 1972). Mägiste (1979) found that middle-class German high school students living in Sweden needed at least 6 years before they could demonstrate productive language competence in Swedish at the same level as in German. They also needed from 4 to 5 years before they could comprehend with equal facility in their two languages. Mack (1984) even found differences in the reading of very fluent adult French-English bilinguals and monolingual readers, with the differences favoring the monolinguals. These differences were in the form of slower reaction times for the bilingual readers on word recognition tasks.

It would be surprising if children from language minority backgrounds in the U.S. could master a second language more efficiently than students from socioeconomically privileged backgrounds. To expect children from language minority communities to learn a second language sufficiently well in the two to three years generally allotted to bilingual and English as a second language programs is disingenuous and potentially harmful to teachers and children.

Transfer

Better understanding of the mechanism called transfer may be a key to unlocking the door to literacy acquisition for language minority students. Transfer, in the context of bilingual individuals, refers to timely cross-linguistic accessing of information. It involves recognition on the part of a bilingual individual that a situation or problem is similar enough to information learned in one's other language such that a link is warranted between the two domains.

Jiménez (1992) found that *successful* bilingual readers have figured out how to utilize their knowledge and abilities developed in Spanish to enhance their English reading comprehension. They strategically implement this knowledge in a timely manner; specifically, they have well-defined strategies when confronting unknown words and/or unfamiliar expressions in English. Less proficient bilingual readers appear to view their two languages as separate and unrelated, and consequently do not take advantage of their full linguistic repertoire (see also Jiménez, García & Pearson, in press).

Students themselves have much to say about reading and its relationship to bilingualism. The following quote was provided by a successful bilingual reader of English in the sixth grade. Several issues can be delineated within his comment; these include the understanding that reading consists of a body of knowledge, that this body of knowledge is useful for reading in both Spanish and English, and that ones primary or native language can facilitate acquisition of this information.

> Marcos: Because let's say there are rules to be a good reader, like you have to read carefully if it's something difficult to read, and read however you want if it's easy. And in Spanish . . .you could learn those rules easier because you know more Spanish than English if you are Latin American, but if you are an American.. .it should be easier in English than in Spanish.

Some researchers invoke the concept of transfer to explain student academic achievement. For example, Saville-Troike (1984), in a year-long study of 19 children who spoke 7 different languages, found that with only two exceptions children who were highly proficient readers in their native language also did well in English reading. She attributed this result to the transfer of reading

strategies, such as the ability to infer the meanings of unknown words and facility resolving textual ambiguities. She concluded that children who had the opportunity to discuss concepts in their native language, either with other children or adults, were among the most successful achievers.

Langer, Bartolomé, Vásquez, and Lucas (1990) claim that their subjects used knowledge of Spanish as support when encountering difficulties reading English. They also reported that children who tended to be good readers in either of their two languages also tended to be good readers in their other language. They attributed this phenomenon to the transfer of good meaning making strategies across languages.

These findings have important implications for language minority students. Finding ways to facilitate and accelerate transfer of information across languages holds promise for helping language minority students more fully demonstrate their competence in reading and writing. Unfortunately, little research reports on instructional practices that promote transfer of information across languages.

Language Specific Reading Strategies

Transfer facilitates learning those features and characteristics shared across languages, but characteristics that distinguish languages logically require additional attention and learning. Kendall, Lajeunesse, Chmilar, Shapson, and Shapson (1987) found that immersion students began to differentiate between their two languages (French and English) by the end of the second grade. Bernhardt (1984) examined novice-, experienced-, and native-German readers and found that the more experienced the reader, the longer their eye fixations were on articles and prepositions. These words are important determiners in German of case and gender.

Bernhardt's findings suggest that increasing levels of language proficiency are associated with the development of correspondingly increasing discrimination between the writing systems associated with each language. At least a certain number of language-specific strategies seem to be necessary. Language minority students need opportunities to learn those features of English that differ from their primary language, and which, consequently, require focused, and at least initially, conscious, attention.

More proficient readers, both native-Spanish and native-English speakers, adjust their reading strategies depending on the language

of the text and their own perceived proficiency in that language. Jiménez, García and Pearson (in press) found that good bilingual readers, for example, monitor their reading more when dealing with text in their weaker language. Less proficient readers have been shown to approach all reading tasks in the same manner, usually a bottom-up approach (Baker & Brown, 1984; Garner, 1987; Palincsar & Klenk, 1992).

Instructional Practices that Promote the Literacy Acquisition of Language Minority Students

Vocabulary instruction. Experienced teachers of language minority children implement distinctive vocabulary instruction (Gersten & Jiménez, 1994). For example, they do not teach all words that students might not know but only those necessary for comprehension. In one classroom this meant that the word "drought" -- a crucial word for understanding the story being read (and a very meaningful word for a Californian) -- served as the lesson's focus, but the interesting, albeit obscure, "savannah" was not taught. The same teacher showed how what students already knew related to new words. She demonstrated, for example, the meaning of the word "pierced", by cutting a hole in a sheet of paper with a scissors, and she followed up by later repeating her demonstration and explanation.

Extended discussion of a limited number of new vocabulary items appears to be another promising alternative to simply providing a students with one-word synonyms or asking them to copy definitions from a glossary. Such discussions were observed in the combined fifth/sixth-grade classroom of Miguel Ramos (see Jiménez & Gersten, 1993). When new words were presented, at least four to five students typically responded. Approximately five words were presented for each story. For example, in the story, *La Calle es Libre* (The Street is Free), Miguel asked his students what the word "*cancha*" (court or playing field) meant. Although Miguel's prompting was minimal, students' knew from experience what was expected and they responded enthusiastically. Notice the high degree of student participation and the quantity of student-generated discourse:

Miguel Ramos: ¿Qué es una cancha? (*What is a court?*)
Bea: Donde jugar. (*Where you play.*)
Ramón: Una cancha es un lugar muy grande donde juegan.
(*A court is a big place where [children] play*.)

Man: Poniéndole zacate, también unas canchas pueden tener columpios. Tienen canchas de básquetbol y de futbol. (*Putting in grass, also some courts have playground equipment.*)

Nancy: Una cancha es donde juegan béisbol. (A court or *playing field is where [children] play baseball.*)

Miguel Ramos also taught his students reading in English. His instruction in English had the same characteristics as those observed in Spanish. In fact, students' extensive experience with an interactional format characterized by high levels of student involvement may have facilitated their English reading acquisition. The construction of English-language contexts characterized by high levels of similarity to those experienced by students in their native language are fertile with possibilities for transfer.

Instructional implications of time. The research reviewed in this paper suggests that a long-term approach to literacy instruction must be considered if the goal is to promote high levels of reading comprehension for Spanish/English bilingual students (Weber, 1991). Little evidence suggests that one method or another, or one program or another, in and of itself, can accelerate language learning to the point necessary to ensure high levels of reading comprehension. Teachers and schools should understand that while an occasional student may quickly demonstrate high levels of literacy attainment, this is not generally the case for any *group* of students learning a second language.

Instruction designed to facilitate transfer. While more carefully focused research on transfer is needed, some preliminary findings from observations in classrooms with large numbers of Latino children are presented (see Gersten & Jiménez, 1994). At least two types of instructional practices seem to facilitate transfer: the first can only be conducted by teachers or others who know their students' native language, while the second appears to be within the grasp of monolingual English-speaking teachers with sensitivity to the difficulties involved in language learning.

In the following example, the teacher had asked her third-grade students to orally report a brief summary of books previously read. She wanted students to provide a one or two sentence general description of the text. The teacher, Rosa Mata, is Chicana and a fluent speaker of both English and Spanish. The eight-year old child, Ana, stood in front of the class, as did many of her classmates, but she was silent. The teacher's prompts and

knowledge of what this child knows and can report appear to guide her scaffolding (support) of this short exchange. In the excerpt below, the student's Spanish responses to the teacher's English questions are translated into English in italics.

Rosa Mata: What is it you don't know how to say? Say it in Spanish first.

Ana: Los niños están asustados porque su abuelito les contó un cuento. (*The children are frightened because their grandfather told them a story.*)

Rosa: Okay, because grandfather told them a story about a dragon. Was there a real dragon? What happened?

Ana: Ellos estaban corriendo y se encontraron con sus abuelitos. (*They were running and they met their grandparents.*)

Rosa: Okay, they were running and they met their grandparents. Do you have anything else to say Ana? Okay, your next book report is going to be in English because I've heard you talk English outside and you do a good job.

A few interesting features of the teacher-student exchange above are that Rosa Mata used only English in her interaction with Ana, even though the exchange could not have occurred without her knowledge of Spanish. Also, Rosa drew from her own knowledge of the book to expand, elaborate, and focus Ana's somewhat incomplete statement. In other words, Rosa provided *bilingual scaffolding* to this student. Although Ana spoke in Spanish, she expressed ideas about an English language book she read. The teacher was building Ana's (receptive) English language abilities in the context of reading instruction. Ana was, thus, able to draw on her knowledge and express information gained from reading an English language book. This exchange was successful for Ana because of what her teacher knew about her, and about her language.

In the next exchange, the teacher Miguel Ramos, conducted a conversation with his fifth-grade students in preparation for a story they were about to read about cowboys and cowgirls. The setting is a bilingual classroom and Miguel and his students collaboratively created a list of *English* vocabulary related to this topic. Miguel's technique is simple but effective as the comment by his student José attests.

Miguel Ramos: If you don't understand all those words, raise your hand.
Cristina: Holster
Cheli: Chaps
Miguel draws a picture of chaps and a holster
José: O, sí, sí, sí. Ya sí que son. (*Oh, yes, yes, yes. Now I know what they are.)*

Like Rosa Mata, Miguel, although fluent in Spanish and English, does not use Spanish when speaking to his students, neither is it necessary for his understanding of the students. His understanding of Spanish clearly facilitates the exchange. José's comments indicate that he possessed the necessary information for comprehending the vocabulary presented, but without the proper scaffolding, he might have been incapable of convincing either himself or his teacher that he did. These examples point out how crucial instruction designed to facilitate transfer of information across languages can be to the success or failure of second language students' comprehension of English.

The work of Luis Moll (1988) supports the idea that access to a second-language learner's first and stronger language can have beneficial effects on that student's reading. Moll organized a learning situation so that Mexican-American students learning English could discuss their English reading in Spanish. The students were capable of dealing with much more sophisticated English text in this manner, and they also demonstrated ability to comprehend at a higher level than was previously the case. Goldman, Reyes, and Varnhagen (1984) report that when Spanish/English bilingual children reading fables in English were encouraged to use Spanish for a retelling task, they could recall the fables as well as when they read them in their first language (Spanish).

Implications of the development of language specific reading strategies for instruction. While students learning a second language may possess knowledge and abilities useful for reading in a second language, they often fail to make use of such information. Finding ways to facilitate timely application of these special resources makes pedagogic sense. Cognitive control of the reading process for bilingual readers includes access to all of the knowledge and ability at their command, including the use of both languages. Examples of such control include procedural knowledge of when to switch languages for purposes of lexical access, when to

process text via the stronger or weaker language, and when to express oneself in the language that is most advantageous for comprehension. Metacognitive development for bilingual readers, while similar to that of monolingual readers, is distinctive, and in some ways more complex. What bilingual readers know about themselves, about different genres of text, and about various reading strategies is most definitely affected by their bilingualism. Instructional implications of this distinctiveness have just begun to be specified.

Of relevance to language minority students is the realization that *not all strategies necessary for comprehending English text can be transferred*, and that it is essential for researchers and practitioners to identify possible candidates for instruction. Possibilities include making explicit the differences and similarities in sound-symbol correspondences in Spanish and English, pointing out that lexical items possess ranges of meaning rather than simplistic one to one translation correspondences, and finally, sharing the knowledge that authors work on the basis of an assumed cultural knowledge base that differs by speech community. All of these domains of information lend themselves to instruction.

Summary, Discussion, and Conclusion

In summary, potential problems for second language readers include an often limited English vocabulary knowledge, and the need for a lengthy period of time to learn English. The potential of transfer for enhancing the reading achievement of language minority students, and the development of specific second language reading strategies, are important concepts for understanding the literacy achievement of language minority students. Finally, identifying instructional practices that enhance language minority students' ability to comprehend English language materials holds promise for improving the low levels of reading achievement documented for many students learning ESL (de Ia Rosa & Maw, 1990).

Bilingual readers, even proficient and successful English readers, encounter many unfamiliar vocabulary items while reading English text. These vocabulary items are often not the type of words that native English speakers would find difficult. They are also not likely to be words that monolingual English-speaking teachers would choose for instruction prior to presenting new material.

Publishers of curricular materials provide lists of pre-selected vocabulary items and suggest that these words be taught. Many teachers comply with their request (Durkin, 1989). In classrooms making use of literature-based instruction, individual teachers, and at times, teams of teachers, make the decision as to which words should be taught. Even when a sophisticated system, such as that advocated by Nagy (1988), is implemented (i.e., teaching words necessary for text comprehension and for which little contextual support is available) ESL learners will probably still encounter many unknown words.

Anderson and Freebody (1981) claim that vocabulary knowledge and reading comprehension are strongly related. They further claim that, "...people who do not know the meanings of very many words are certain to be poor readers." (p. 110) Although this conclusion may be accurate with respect to students from mainstream backgrounds, second-language readers complicate considerably the relationship between word knowledge and reading comprehension.

Vocabulary instruction for students learning English needs to be both effective and sensitive to their unique language backgrounds. The accomplishment of effective and sensitive vocabulary instruction requires interaction between teacher and student. Teachers need to know both how to pre-select and teach essential vocabulary, and how to respond to students' requests for more information.

As an instructional concept, transfer holds such strong intuitive appeal for enhancing the academic achievement of bilingual students that theoreticians such as Cummins (1979; 1980; 1981) invoke its power as *the* basis for native-language instruction. Cummins popularized the notion that transfer *will* occur if language minority students receive instruction in their native language. Many teachers have understood this to mean that transfer is inevitable after providing students with some native language instruction. It is argued here that transfer *can* occur after knowledge is acquired via one language or the other, that it operates in both directions — Spanish to English and English to Spanish — but that it is *not* inevitable.

Two necessary points dealing with transfer include the following: first, while some students discover on their own how to make connections between what they learn in one language to reading and writing activities in their second language, many clearly

do not. Large scale evaluations of bilingual education, while controversial, consistently report that far too many students are performing below acceptable levels by the time they reach middle school regardless of program type (Cziko, 1992; Gersten & Woodward, in press; Ramírez, 1992). It is incumbent, then, upon educators and other professionals to delineate conditions and contexts that serve to promote successful transfer.

Second, although transfer is possible under certain conditions, a reasonable hypothesis is that cross-linguistic transfer can be enhanced and encouraged. Instruction and classroom environments that facilitate transfer for children learning English as a second language, are, thus, not a luxury but a necessity. Instruction that facilitates transfer regardless of whether students were previously enrolled in a native-language program should be encouraged. All children possess potentially valuable knowledge and experiences that could be drawn on to enhance their learning. All children also know a great deal of information that they have gained outside the classroom. Carefully designed instruction, such as that reported on and presented in this paper, is needed to maximize this most promising avenue of student learning.

In conclusion, several changes in current practice are suggested by this review. These changes include more promising techniques for teaching English vocabulary, instruction of strategies that promote transfer because of their potential for large academic payoffs, and instruction of proven reading strategies because too often these are not taught at all or, if they are, students often do not understand them. The necessity of making available to language minority students access to native-language strengths also appears to be a key component of instruction that facilitates, rather than impedes, English language literacy acquisition.

References

Anderson, R. C., & Freebody, P. 1981. Vocabulary knowledge: A state of the art survey. In J. J. Guthrie (Ed.), *Comprehension and teaching: Research reviews*. Newark, DE: International Reading Association.

Baker, L., & Brown, A. L. 1984. Metacognitive skills and reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 353-394). New York: Longman.

Barr, R., Kamil, M. L., Mosenthal, P., & Pearson, P. D. 1991. *Handbook of reading research.* Volume ii. New York: Longman.

Bernhardt, E. B. 1984. Toward and information processing perspective in foreign language reading. *The Modern Language Journal, 68*(4), 322-331.

Collier, V. P. 1987. Age and acquisition of second language for academic purposes. *TESOL Quarterly, 21*(4), 617-641.

Cummins, J. 1979. Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research, 49*(2), 222-251.

Cummins, J. 1980. The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly, 14*(2), 175-187.

Cummins, J. 1981. Language proficiency and academic achievement. In J. W. OIler (Ed.), *Issues in language testing research* . Rowley, MA: Newbury House.

Cziko, G. A. 1992. The evaluation of bilingual education: From necessity and probability to possibility. *Educational Researcher, 21*(2), 10-15.

Delgado-Gaitan, C. 1990. *Literacy for empowerment. The role of parents in children's education*. New York: Falmer Press.

de la Rosa, D., & Maw, C. E. 1990. *Hispanic education. A statistical portrait 1990*. Washington DC: Policy Analysis Center-Office of Research, Advocacy, and Legislation-National Council of La Raza.

Durkin, D. 1989. *Teaching them to read* (5th ed.). Boston: Allyn & Bacon.

Espinosa, R., & Ochoa, A. 1986. Concentration of California Hispanic students in schools with low achievement: A research note. *American Journal of Education, 95*(1), 77-95.

García, G. E. 1988. *Factors influencing the English reading test performance of Spanish-English bilingual children*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign, Champaign, IL.

García, G. E. 1991. Factors influencing the English reading test performance of Spanish-speaking Hispanic children. *Reading Research Quarterly, 26*(4), 371-392.

García, G. E., Pearson, P. D., & Jiménez, R. 1994. *The at-risk dilemma: A synthesis of the reading literature.* (Special Report). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

García, G. E., Stephens, D. L., Koenke, K. R., Pearson, P. D., Harris, V. J., & Jiménez, R. T. 1989. *A study of classroom practices related to the reading of low-achieving students: Phase one* (Study 2.2.3.5). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Garner, R. 1987. *Metacognition and reading comprehension*. Norwood, NJ: Ablex.

Gersten, R. M., & Jiménez, R. T. 1994. A delicate balance: Enhancing literacy instruction for language minority students. *The Reading Teacher, 47* (6), 438-449.

Gersten, R. M., & Woodward, J. (in press). A longitudinal study of transitional and immersion bilingual education programs in one district. *Elementary School Journal.*

Goldman, S. R., Reyes, M., & Varnhagen, C. K. 1984. Understanding fables in first and second languages. *NABE Journal, 8*(2), 835-866.

Jiménez, R. T. 1992. *Opportunities and obstacles in bilingual reading*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign, Champaign, IL.

Jiménez, R. T., García, G. E., & Pearson, P. D. (In press). *The metacognitive strategies of Latino students who read Spanish and*

English. (Technical Report). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Jiménez, R. T., & Gersten, R. M. April, 1983. *Culture, community, and classroom: Chicano teachers' knowledge of and instructional practices for teaching language minority students*. Paper presented at the Annual Conference of the American Educational Research Association, Atlanta, GA.

Johnson, D. D., & Pearson, P. D. 1984. *Teaching reading vocabulary*. New York: Holt, Rinehart, & Winston.

Kendall, J. R., Lajeunesse, G., Chmilar, P., Shapson, L. R., & Shapson, S. M. 1987. English reading skills of French immersion students in kindergarten and grades 1 and 2. *Reading Research Quarterly, 22*(2), 135-159.

Lambert, W. E., & Tucker, G. R. 1972. *Bilingual education of children. The St. Lambert experiment.* Rowley, MA: Newbury House.

Langer, J. A., Bartolomé, L., Vásquez, 0., & Lucas, T. 1990. Meaning construction in school literacy tasks: A study of bilingual students. *American Educational Research Journal, 27*(3), 427-471.

Mack, M. 1984. Early bilinguals: How monolingual-like are they? In M. Paradis, & Y. Lebrun (Ed.), *Early bilingualism and child development* (pp. 161-173). Lisse. Swets & Zeitlinger.

Mägiste, E. 1979. The competing languages systems of the multilingual: A developmental study of decoding and encoding processes. *Journal of Verbal Learning and Verbal Behavior, 18*(1), 79-89.

McLaughlin, B. 1987. Reading in a second language: Studies with adult and child learners. In S. R. Goldman, & H. T. Trueba (Ed.), *Becoming literate in English as a second language* (pp. 57-70). Norwood, NJ: Ablex.

Moll, L. C. 1988. Some key issues in teaching Latino students. *Language Arts, 65*(5), 465-472.

Nagy, W. E. 1988. *Vocabulary instruction and reading comprehension* (Tech. Rep. No. Tech. Rep. 431). Champaign, IL: Center for the Study of Reading, University of Illinois.

Ortiz, V. 1986. Reading activities and reading proficiency among Hispanic, black and white students. *American Journal of Education, 95*(1), 58-76.

Palincsar, A. C., & Klenk, L. 1992. Fostering literacy learning in supportive contexts. *Journal of Learning Disabilities, 25*(4), 211-225, 229.

Pallas, A., Natriello, G., & McDill, E. 1989. The changing nature of the disadvantaged population: Current dimensions and future trends. *Educational Researcher, 18*(5), 16-22.

Pearson, P. D., & Johnson, D. 1978. *Teaching reading comprehension*. New York: Rinehart & Winston.

Pearson, P. D., Barr, R., Kamil, M. L., & Mosenthal, P. 1984. *Handbook of Reading Research.* New York: Longman.

Ramirez, J. D. 1992. Executive summary. *Bilingual Research Journal, 16*(1 & 2), 1-62.

Saville-Troike, M. 1984. What really matters in second language learning for academic achievement. *TESOL Quarterly, 18*(2), 199-219.

Steinberg, L., Blinde, P. L., & Chan, K. 5. 1984. Dropping out among language minority youth. *Review of Educational Research, 54*(1), 113-132.

U.S. Department of Commerce. 1990. U. S. Census. Washington D. C.: U. S. Department of Commerce, Bureau of the Census.

Waggoner, D. 1991. *Undereducation in America: The demography of high school dropouts*. New York: Auburn House.

Weber, R.-M. 1991. Linguistic diversity and reading in American society. In R. Barr, M. L. Kamil, P. Mosenthal & P. D. Pearson (Ed.), *Handbook of reading research, Vol. II* (pp. 97-119). New York: Longman.

Williams J. D., & Snipper, G. C. 1990. *Literacy and bilingualism.* New York: Longman.

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